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CURRENT SERIAL RECORDS

COSTS OF STORING AND HANDLING FARMERS' STOCK PEANUTS
IN COMMERCIAL FACILITIES, 1969

U. S. Department of Agriculture
Economic Research Service

PREFACE

This updates and slightly revises "Costs of Storing and Handling Farmers' Stock Peanuts in Commercial Facilities, 1965/66," ERS 352, published in May 1967. Labor costs in the original study reflected minimum wage rates in effect February 1, 1967. Since that time minimum wage rates have increased (February 1, 1968) and many other price changes have occurred.

This publication reflects price changes through December 1968 on all cost items except depreciation and leases and rent. It is assumed that, in the short run, cost efficiencies achieved by substituting capital for labor would be minor.

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COST OF STORING AND HANDLING FARMERS' STOCK PEANUTS
IN COMMERCIAL FACILITIES, 1969

by

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INTRODUCTION

This report presents and analyzes estimated costs of handling and storing farmers' stock peanuts in commercial facilities during 1969. Costs were calculated by estimating the effect of present minimum wage and hour laws on 1965/66 operating labor data for 64 storage facilities. Employer costs include contributions made for social security, unemployment insurance, and workmen's compensation at 1969 rates. Composite indices were used to update all other costs except depreciation. Base cost data used in computing these costs are from fiscal 1965/66 accounting records of 28 independent warehouses and 36 shelling plants selected randomly to represent principal areas and types of facilities.

Costs were developed for four primary services performed in peanut handling and storage: Cleaning and drying, receiving, loading out, and storage. These services are defined in the appendix. Two types of cost estimates--standardized and replacement--were derived for each service. Out-of-pocket costs, which exclude interest and depreciation charges, were also developed for each service performed.

Average standardized costs per ton received for cleaning and drying peanuts varied from \$2.231 per ton for Southwest shellers to \$4.468 per ton for warehouses in the Southeast. Costs for Virginia-North Carolina shellers were a low 19 cents per ton; however, this group of plants, with limited facilities, performed no cleaning services.

Standardized receiving costs averaged \$2.529 per ton for all facilities and ranged from \$1.999 per ton for Virginia-North Carolina shellers to \$4.192 per ton for warehouses in the Southeast. Considering all areas, standardized load-out costs for all facilities averaged \$1.538, with a range from \$1.198 per ton for Virginia-North Carolina shellers to \$1.965 per ton for Southeast warehouses. Combined standardized handling costs for all facilities averaged \$4.067 per ton.

Average standardized storage cost per ton-month-stored ranged from 57 cents for Virginia-North Carolina shellers to \$1.569 for Virginia-North Carolina warehouses. The higher storage costs of the Virginia-North Carolina warehouses were due primarily to their low average rate of occupancy and short storage period.

For all areas the average cost of carrying out the insect prevention and control program recommended for the 1969 season came to nearly 33 cents per ton of peanuts. Warehouse costs amounted to nearly 42 cents while the cost to shellers was just over 31 cents.

Generally, warehouse costs averaged higher than shellers' costs for all services performed. The only exception was in the Southwest where sheller costs for load-out, combined handling, and storage were above the corresponding warehouse costs. In all production areas, replacement costs differed little from standardized costs.

Table 1.--Sample plants included in survey, capacity and services performed by area and type of facility,
1965/66

Type of facility and area	Sample plant	Total peanut storage capacity	Total ton- months stored	Average occupancy rate	Months space used, average	Receipts 1/ 1/	Shipments 1/ 1/
Warehouse:		Number	Tons	Tons	Percent	Number	Tons
Southeast	10	37,010	159,477	47.9	9.0	33,614	35,512
Southwest	9	21,406	60,656	41.7	6.8	28,214	24,067
Virginia-North Carolina ..	9	10,912	11,124	25.5	4.0	15,648	14,389
Total warehouses	28	69,328	231,257	40.7	8.2	77,476	73,968
Sheller:							
Southeast	18	202,331	642,849	36.9	8.6	203,461	201,103
Southwest	8	53,796	115,080	25.5	8.4	74,351	73,598
Virginia-North Carolina ..	10	47,502	243,331	67.4	7.6	119,455	120,055
Total shellers	36	303,629	1,001,260	39.3	8.4	397,267	394,756
All facilities	64	372,957	1,232,517	39.8	8.3	474,743	468,724

1/ Excludes paper transfers.

Table 2.--Standardized weighted average costs per ton for handling and storing farmers' stock peanuts, by area and type of facility, estimated 1969

Area and type of facility	Receiving	Load-out	Combined handling ^{1/}	Storage	Total annual
	Dollars	Dollars	Dollars	Dollars	Dollars
Southeast:					
Sheller	2.273	1.503	3.776	1.826	5.602
Warehouse	4.192	1.965	6.157	3.459	9.616
All facilities	2.545	1.574	4.119	2.058	6.177
Southwest:					
Sheller	3.011	1.881	4.892	1.751	6.643
Warehouse	3.301	1.752	5.053	1.546	6.599
All facilities	3.092	1.849	4.941	1.693	6.634
Virginia-North Carolina:					
Sheller	1.999	1.198	3.197	1.161	4.358
Warehouse	2.647	1.712	4.359	1.115	5.474
All facilities	2.075	1.254	3.329	1.153	4.482
All areas:					
Sheller	2.329	1.481	3.810	1.612	5.422
Warehouse	3.556	1.847	5.403	2.262	7.665
All facilities	2.529	1.538	4.067	1.719	5.786

^{1/} Combined handling cost is total of receiving and load-out costs.

Table 3.--Replacement weighted average costs per ton for handling and storing farmers' stock peanuts, by area and type of facility, estimated 1969

Area and type of facility	Receiving	Load-out	Combined handling 1/	Storage	Total annual
	Dollars	Dollars	Dollars	Dollars	Dollars
Southeast:					
Warehouse	4.214	1.971	6.185	3.487	9.672
Sheller	2.288	1.511	3.799	1.959	5.758
All facilities	2.560	1.581	4.141	2.176	6.317
Southwest:					
Warehouse	3.308	1.754	5.062	1.759	6.821
Sheller	3.015	1.882	4.897	1.999	6.896
All facilities	3.096	1.850	4.946	1.931	6.877
Virginia-North Carolina:					
Warehouse	2.682	1.725	4.407	1.170	5.577
Sheller	2.034	1.208	3.242	1.422	4.664
All facilities	2.110	1.264	3.374	1.390	4.764
All areas:					
Warehouse	3.575	1.853	5.428	2.390	7.818
Sheller	2.348	1.488	3.836	1.805	5.641
All facilities	2.548	1.546	4.094	1.900	5.994

1/ Combined handling cost is total of receiving and load-out costs.

Table 4.--Out-of-pocket weighted average costs per ton for handling and storing farmers' stock peanuts, by area and type of facility, estimated 1969

Area and type of facility	Receiving	Load-out	Combined handling 1/	Storage	Total annual
	Dollars	Dollars	Dollars	Dollars	Dollars
Southeast:					
Warehouse	3.207	1.673	4.880	2.111	6.991
Sheller	1.907	1.407	3.314	1.257	4.571
All facilities ...	2.091	1.449	3.540	1.381	4.921
Southwest:					
Warehouse	2.952	1.661	4.613	1.193	5.806
Sheller	2.654	1.747	4.401	1.081	5.482
All facilities ...	2.736	1.725	4.461	1.110	5.571
Virginia-North Carolina:					
Warehouse	1.520	1.421	2.941	.655	3.596
Sheller	1.516	1.082	2.598	.686	3.284
All facilities ...	1.516	1.120	2.638	.682	3.320
All areas:					
Warehouse	2.773	1.620	4.327	1.483	5.810
Sheller	1.929	1.372	3.301	1.052	4.353
All facilities ...	2.067	1.411	3.467	1.123	4.590

1/ Combined handling cost is total of receiving and load-out costs.

Table 5.--Weighted average cost per ton for cleaning and drying peanuts, South-east, by type of facility, estimated 1969 1/

Cost item	Sheller	Warehouse	All Southeast facilities
	<u>Dollars</u>	<u>Dollars</u>	<u>Dollars</u>
Fixed:			
Insurance	0.079	0.131	0.086
Taxes .....	.009	.027	.012
Leases and rent .....	.042	.010	.037
Depreciation:			
Standard .....	.775	1.362	.858
Replacement .....	.780	1.468	.878
Interest:			
Standard .....	.236	.445	.265
Replacement .....	.238	.476	.271
Total fixed:			
Standard	1.141	1.975	1.258
Replacement	1.148	2.112	1.284
Variable:			
Direct labor .....	.836	.675	.813
Administrative overhead ....	.293	.738	.356
Home office .....	.022	.014	.021
Repairs and maintenance ....	.358	.084	.319
Utilities .....	.367	.374	.368
Drier fuel .....	.320	.452	.339
Interest on working capital .....	.046	.049	.046
Other .....	.082	.107	.086
Total variable	2.324	2.493	2.348
Total:			
Standard	3.465	4.468	3.606
Replacement	3.472	4.605	3.632
Out-of-pocket	2.454	2.661	2.483

1/ Cleaning and drying costs were developed on the basis of total receipts, rather than the quantity of peanuts cleaned and/or dried. For cost per ton dried see table 8. The percentage of receipts cleaned and dried was as follows:

	<u>Warehouse</u>	<u>Sheller</u>
Cleaned	52.4	43.9
Dried	59.4	35.9

Table 6.--Weighted average cost per ton for cleaning and drying peanuts, Southwest, by type of facility, estimated 1969 1/

Cost item	Sheller	Warehouse	All Southwest facilities
	<u>Dollars</u>	<u>Dollars</u>	<u>Dollars</u>
Fixed:			
Insurance	0.077	0.145	0.095
Taxes .....	.014	.018	.015
Leases and rent .....	.007	.019	.010
Depreciation:			
Standard .....	.623	.985	.722
Replacement .....	.629	1.001	.731
Interest:			
Standard .....	.198	.301	.227
Replacement .....	.200	.305	.229
Total fixed:			
Standard .....	.919	1.468	1.069
Replacement .....	.927	1.488	1.080
Variable:			
Direct labor .....	.629	.444	.578
Administrative overhead ...	.189	.405	.249
Home office .....	.006	.002	.005
Repairs and maintenance ...	.055	.052	.054
Utilities .....	.136	.363	.198
Drier fuel .....	.182	.454	.257
Interest on working capital .....	.026	.036	.029
Other .....	.089	.085	.088
Total variable	1.312	1.841	1.458
Total:			
Standard	2.231	3.309	2.527
Replacement	2.239	3.329	2.538
Out-of-pocket	1.410	2.023	1.578

1/ Cleaning and drying costs were developed on the basis of total receipts, rather than the quantity of peanuts cleaned and/or dried. For cost per ton dried see table 8. The percentage of receipts cleaned and dried was as follows:

	<u>Warehouse</u>	<u>Sheller</u>
Cleaned	72.2	12.2
Dried	54.6	17.7

Table 7.--Weighted average cost per ton for cleaning and drying peanuts,
Virginia-North Carolina, by type of facility, estimated 1969 1/

Cost item	Sheller	Warehouse	All Virginia-North Carolina facilities
	<u>Dollars</u>	<u>Dollars</u>	<u>Dollars</u>
Fixed:			
Insurance	0.001	0.105	0.014
Taxes .....	.001	.022	.004
Leases and rent .....	.002	--	.001
Depreciation:			
Standard .....	.018	1.148	.149
Replacement .....	.018	1.177	.153
Interest:			
Standard .....	.005	.346	.045
Replacement .....	.005	.355	.046
Total fixed:			
Standard .....	.027	1.621	.213
Replacement .....	.027	1.659	.218
Variable:			
Direct labor .....	.054	.192	.070
Administrative overhead ....	.020	.295	.052
Home office .....	.001	--	2/
Repairs and maintenance ....	.038	.139	.049
Utilities .....	.010	.169	.028
Drier fuel .....	.010	.614	.080
Interest on working capital .....	.003	.030	.006
Other .....	.027	.073	.033
Total variable .....	.163	1.512	.318
Total:			
Standard .....	.190	3.133	.531
Replacement .....	.190	3.171	.536
Out-of-pocket .....	.167	1.639	.337

1/ Cleaning and drying costs were developed on the basis of total receipts, rather than the quantity of peanuts cleaned and/or dried. For cost per ton dried see table 8. The percentage of receipts cleaned and dried was as follows:

	<u>Warehouse</u>	<u>Sheller</u>
Cleaned	0	6.8
Dried	40.9	.5

2/ Less than .0005.

Table 8.--Standardized average cleaning and drying costs per ton dried, by area and type of facility, estimated 1969

Area and type of facility	Cost per ton dried		
	Standardized	Replacement	Out-of-pocket
	<u>Dollars</u>	<u>Dollars</u>	<u>Dollars</u>
Southeast:			
Warehouse	7.522	7.753	4.480
Sheller	9.652	9.671	6.836
Southwest:			
Warehouse	6.060	6.097	3.705
Sheller	12.605	12.650	7.966
Virginia-North Carolina:			
Warehouse	7.660	7.753	4.007
Sheller <u>1/</u>	2.794	2.794	2.456
All areas:			
Warehouse	7.020	7.146	4.069
Sheller	10.310	10.332	7.058

1/ Cost per ton cleaned.

Table 9.--Weighted average cost per ton for receiving peanuts, Southeast, by type of facility, estimated 1969

Cost item	Sheller	Warehouse	All Southeast facilities
	<u>Dollars</u>	<u>Dollars</u>	<u>Dollars</u>
Fixed:			
Insurance	0.026	0.071	0.033
Taxes .....	.004	.015	.005
Leases and rent .....	.036	.006	.032
Depreciation:			
Standard .....	.279	.742	.345
Replacement .....	.291	.759	.357
Interest:			
Standard .....	.087	.243	.109
Replacement .....	.090	.248	.112
Total fixed:			
Standard .....	.432	1.077	.524
Replacement .....	.447	1.099	.539
Variable:			
Direct labor .....	.912	1.330	.971
Administrative overhead ....	.330	1.325	.471
Home office .....	.019	.008	.017
Repairs and maintenance ....	.315	.157	.292
Utilities .....	.113	.096	.111
Drier fuel	--	--	--
Interest on working capital .....	.036	.061	.040
Other .....	.116	.138	.119
Total variable	1.841	3.115	2.021
Total:			
Standard	2.273	4.192	2.545
Replacement	2.288	4.214	2.560
Out-of-pocket	1.907	3.207	2.091

Table 10.--Weighted average cost per ton for receiving peanuts, Southwest, by type of facility, estimated 1969

Cost item	Sheller	Warehouse	All Southwest facilities
	<u>Dollars</u>	<u>Dollars</u>	<u>Dollars</u>
Fixed:			
Insurance	0.033	0.023	0.030
Taxes .....	.005	.003	.005
Leases and rent .....	.004	.008	.005
Depreciation:			
Standard .....	.269	.268	.269
Replacement .....	.272	.273	.272
Interest:			
Standard .....	.088	.081	.087
Replacement .....	.089	.083	.088
Total fixed:			
Standard .....	.399	.383	.396
Replacement .....	.403	.390	.400
Variable:			
Direct labor	1.699	2.011	1.785
Administrative overhead .....	.605	.776	.652
Home office .....	.004	.001	.003
Repairs and maintenance .....	.098	.036	.081
Utilities .....	.057	.026	.048
Drier fuel	--	--	--
Interest on working capital .....	.051	.057	.053
Other .....	.098	.011	.074
Total variable	2.612	2.918	2.696
Total:			
Standard	3.011	3.301	3.092
Replacement	3.015	3.308	3.096
Out-of-pocket	2.654	2.952	2.736

Table 11.--Weighted average cost per ton for receiving peanuts, Virginia-North Carolina, by type of facility, estimated 1969

Cost item	Sheller	Warehouse	All Virginia- North Carolina facilities
	<u>Dollars</u>	<u>Dollars</u>	<u>Dollars</u>
Fixed:			
Insurance	0.033	0.078	0.039
Taxes .....	.024	.016	.023
Leases and rent .....	.008	--	.007
Depreciation:			
Standard .....	.371	.866	.429
Replacement .....	.398	.893	.456
Interest:			
Standard .....	.112	.261	.130
Replacement .....	.120	.269	.138
Total fixed:			
Standard .....	.548	1.221	.628
Replacement .....	.583	1.256	.663
Variable:			
Direct labor .....	.570	.531	.565
Administrative overhead .....	.445	.686	.473
Home office .....	.003	--	.002
Repairs and maintenance .....	.237	.115	.223
Utilities .....	.032	.044	.033
Drier fuel	--	--	--
Interest on working capital .....	.028	.028	.028
Other .....	.136	.022	.123
Total variable	1.451	1.426	1.447
Total:			
Standard	1.999	2.647	2.075
Replacement	2.034	2.682	2.110
Out-of-pocket	1.516	1.520	1.516

Table 12.--Weighted average cost per ton for peanut load-out, Southeast, by type of facility, estimated 1969

Cost item	Sheller	Warehouse	All Southeast facilities
	<u>Dollars</u>	<u>Dollars</u>	<u>Dollars</u>
Fixed:			
Insurance	0.007	0.021	0.009
Taxes .....	.001	.004	.001
Leases and rent .....	.031	.004	.027
Depreciation:			
Standard .....	.073	.213	.094
Replacement .....	.079	.218	.099
Interest:			
Standard .....	.023	.079	.031
Replacement .....	.025	.080	.033
Total fixed:			
Standard .....	.135	.321	.162
Replacement .....	.143	.327	.169
Variable:			
Direct labor .....	.724	.863	.745
Administrative overhead ....	.212	.570	.266
Home office .....	.016	.006	.015
Repairs and maintenance ....	.271	.069	.242
Utilities .....	.039	.063	.043
Drier fuel	--	--	--
Interest on working capital .....	.027	.032	.028
Other .....	.079	.038	.073
Total variable	1.368	1.644	1.412
Total:			
Standard	1.503	1.965	1.574
Replacement	1.511	1.971	1.581
Out-of-pocket	1.407	1.673	1.449

Table 13.--Weighted average cost per ton for peanut load-out, Southwest, by type of facility, estimated 1969

Cost item	Sheller	Warehouse	All Southwest facilities
	<u>Dollars</u>	<u>Dollars</u>	<u>Dollars</u>
Fixed:			
Insurance	0.013	0.006	0.010
Taxes .....	.001	1/	.001
Leases and rent .....	.003	.007	.004
Depreciation:			
Standard .....	.099	.069	.092
Replacement .....	.100	.071	.093
Interest:			
Standard .....	.035	.022	.032
Replacement .....	.035	.022	.032
Total fixed:			
Standard .....	.151	.104	.139
Replacement .....	.152	.106	.140
Variable:			
Direct labor	1.349	1.061	1.278
Administrative overhead ....	.230	.483	.292
Home office .....	.003	.001	.003
Repairs and maintenance ....	.048	.024	.042
Utilities .....	.025	.020	.024
Drier fuel	--	--	--
Interest on working capital .....	.034	.032	.034
Other .....	.041	.027	.037
Total variable	1.730	1.648	1.710
Total:			
Standard	1.881	1.752	1.849
Replacement	1.882	1.754	1.850
Out-of-pocket	1.747	1.661	1.725

1/ Less than .0005.

Table 14.--Weighted average cost per ton for peanut load-out, Virginia-North Carolina, by type of facility, estimated 1969

Cost item	: Sheller	: Warehouse	: All Virginia- North Carolina facilities
	: <u>Dollars</u>	: <u>Dollars</u>	: <u>Dollars</u>
Fixed:	:		
Insurance .....	.008	.021	.009
Taxes .....	.005	.004	.005
Leases and rent .....	.006	--	.006
Depreciation:	:		
Standard .....	.089	.224	.103
Replacement .....	.097	.234	.111
Interest:	:		
Standard .....	.027	.067	.031
Replacement .....	.029	.070	.033
	:		
Total fixed:	:		
Standard .....	.135	.316	.154
Replacement .....	.145	.329	.164
	:		
Variable:	:		
Direct labor .....	.423	.589	.441
Administrative overhead ....	.323	.664	.360
Home office .....	.002	--	.002
Repairs and maintenance ....	.168	.074	.158
Utilities .....	.017	.018	.017
Drier fuel	--	--	--
Interest on working capital .....	.021	.027	.022
Other .....	.109	.024	.100
	:		
Total variable	1.063	1.396	1.100
	:		
Total:	:		
Standard	1.198	1.712	1.254
Replacement	1.208	1.725	1.264
	:		
Out-of-pocket	1.082	1.421	1.120
	:		

Table 15.--Weighted average cost per ton-month for peanut storage, Southeast,
by type of facility, estimated 1969

Cost item	Sheller	Warehouse	All Southeast facilities
	<u>Dollars</u>	<u>Dollars</u>	<u>Dollars</u>
Fixed:			
Insurance	0.032	0.033	0.032
Taxes .....	.003	.007	.004
Leases and rent .....	.115	.026	.097
Depreciation:			
Standard .....	.111	.173	.123
Replacement .....	.137	.176	.145
Interest:			
Standard .....	.069	.111	.077
Replacement .....	.085	.114	.090
Total fixed:			
Standard .....	.330	.350	.333
Replacement .....	.372	.356	.368
Variable:			
Direct labor .....	.047	.112	.060
Administrative overhead ...	.058	.080	.063
Home office .....	.006	.003	.006
Repairs and maintenance ...	.060	.044	.057
Utilities .....	.007	.011	.008
Drier fuel	--	--	--
Interest on working capital .....	.005	.007	.005
Other .....	.065	.122	.076
Total variable .....	.248	.379	.275
Total:			
Standard .....	.578	.729	.608
Replacement.....	.620	.735	.643
Out-of-pocket .....	.398	.445	.408

Table 16.--Weighted average cost per ton-month for peanut storage, Southwest,
by type of facility, estimated 1969

Cost item	Sheller	Warehouse	All Southwest facilities
	<u>Dollars</u>	<u>Dollars</u>	<u>Dollars</u>
Fixed:			
Insurance	0.067	0.047	0.060
Taxes .....	.011	.005	.009
Leases and rent .....	.076	.018	.056
Depreciation:			
Standard .....	.268	.102	.211
Replacement .....	.368	.163	.297
Interest:			
Standard .....	.165	.062	.129
Replacement .....	.225	.100	.182
Total fixed:			
Standard .....	.587	.234	.465
Replacement .....	.747	.333	.604
Variable:			
Direct labor .....	.324	.243	.296
Administrative overhead ....	.061	.135	.086
Home office .....	.001	1/	.001
Repairs and maintenance ....	.075	.051	.067
Utilities .....	.006	.009	.007
Drier fuel	--	--	--
Interest on working capital .....	.011	.010	.010
Other .....	.066	.037	.056
Total variable .....	.544	.485	.523
Total:			
Standard	1.131	.719	.988
Replacement	1.291	.818	1.127
Out-of-pocket .....	.698	.555	.648

1/ Less than .0005.

Table 17.--Weighted average cost per ton-month for peanut storage, Virginia-North Carolina, by type of facility, estimated 1969

Cost item	Sheller	Warehouse	All Virginia-North Carolina facilities
	<u>Dollars</u>	<u>Dollars</u>	<u>Dollars</u>
Fixed:			
Insurance	0.026	0.191	0.033
Taxes .....	.019	.041	.019
Leases and rent .....	.016	.273	.027
Depreciation:			
Standard .....	.145	.401	.156
Replacement .....	.225	.450	.234
Interest:			
Standard .....	.088	.246	.094
Replacement .....	.136	.275	.142
Total fixed:			
Standard .....	.294	1.152	.329
Replacement .....	.422	1.230	.455
Variable:			
Direct labor .....	.071	.093	.072
Administrative overhead ....	.071	.136	.073
Home office	1/	--	1/
Repairs and maintenance ....	.039	.126	.043
Utilities .....	.001	.015	.002
Drier fuel	--	--	--
Interest on working capital .....	.005	.008	.006
Other .....	.089	.039	.087
Total variable .....	.276	.417	.283
Total:			
Standard .....	.570	1.569	.612
Replacement .....	.698	1.647	.738
Out-of-pocket .....	.337	.922	.362

1/ Less than .0005.

Table 18.--Average storage period per ton stored by area and type of facility,
1965/66

Area and type of facility	Average storage period
:	
:	<u>Months</u>
Southeast:	
Warehouse	4.7
Sheller	3.2
:	
Southwest:	
Warehouse	2.2
Sheller	1.5
:	
Virginia-North Carolina:	
Warehouse .....	.7
Sheller	2.0
:	

Tables 19 through 27 were developed as linear cost from total cost of operating peanut storage warehouses. To determine the average ton-month cost of peanut storage over a given time, the total length of storage should be used along with the average percentage of capacity utilized.

For example, using table 19 to determine the average cost per ton-month for Southeast shellers, reading across from 6-month storage and at 50 percent of capacity gives an average cost of 61.20 cents per ton-month. Since values are linear, fractional figures may be interpolated.

Table 19.--Standardized average storage cost per ton-month by average capacity utilized and length of storage, Southeastern shippers, estimated 1969

Months in storage	Average percent of capacity utilized											
	10	20	30	40	50	60	70	80	90	100		
Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars
1.....: 18.3643	9.1821	6.1214	4.5911	3.6729	3.0607	2.6235	2.2955	2.0405	1.8364			
2.....: 9.1821	4.5911	3.0607	2.2955	1.8364	1.5304	1.3117	1.1478	1.0202	.9182			
3.....: 6.1214	3.0607	2.0405	1.5304	1.2243	1.0202	.8745	.7652	.6802	.6121			
4.....: 4.5911	2.2955	1.5304	1.1478	.9182	.7652	.6559	.5739	.5101	.4591			
5.....: 3.6729	1.8364	1.2243	.9182	.7346	.6121	.5247	.4591	.4080	.3673			
6.....: 3.0607	1.5304	1.0202	.7652	.6121	.5101	.4372	.3826	.3401	.3061			
7.....: 2.0235	1.3117	.8745	.6559	.5247	.4372	.3748	.3279	.2915	.2624			
8.....: 2.2955	1.1478	.7652	.5739	.4591	.3826	.3279	.2869	.2551	.2296			
9.....: 2.0405	1.0202	.6802	.5101	.4081	.3401	.2915	.2551	.2267	.2040			
10.....: 1.8364	.9182	.6121	.4591	.3673	.3061	.2624	.2296	.2041	.1836			
11.....: 1.6695	.8347	.5565	.4174	.3339	.2782	.2385	.2087	.1855	.1669			
12.....: 1.5304	.7652	.5101	.3826	.3061	.2551	.2186	.1913	.1700	.1530			

Table 20.--Standardized average storage cost per ton-month by average capacity utilized and length of storage, South-east warehouses, estimated 1969

Months in storage	Average percent of capacity utilized									
	10	20	30	40	50	60	70	80	90	100
Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars
1.....: 31.4128	15.7064	10.4709	7.8532	6.2826	5.2355	4.4875	3.9266	3.4903	3.1413	
2.....: 15.7064	7.8532	5.2355	3.9266	3.1413	2.6177	2.2438	1.9633	1.7452	1.5706	
3.....: 10.4709	5.2355	3.4903	2.6177	2.0942	1.7452	1.4958	1.3089	1.1634	1.0471	
4.....: 7.8532	3.9266	2.6177	1.9633	1.5706	1.3089	1.1219	.9816	.8726	.7853	
5.....: 6.2826	3.1413	2.0942	1.5706	1.2565	1.0471	.8975	.7853	.6981	.6283	
6.....: 5.2355	2.6177	1.7452	1.3089	1.0471	.8726	.7479	.6544	.5817	.5236	
7.....: 4.4875	2.2438	1.4958	1.1219	.8975	.7479	.6411	.5609	.4986	.4488	
8.....: 3.9266	1.9633	1.3089	.9816	.7853	.6544	.5609	.4908	.4363	.3927	
9.....: 3.4903	1.7452	1.1634	.8726	.6981	.5817	.4986	.4363	.3878	.3490	
10....: 3.1413	1.5706	1.0471	.7853	.6283	.5236	.4488	.3927	.3490	.3141	
11....: 2.8557	1.4279	.9519	.7139	.5711	.4760	.4080	.3570	.3173	.2856	
12....: 2.6177	1.3089	.8726	.6544	.5236	.4363	.3740	.3272	.2909	.2618	

Table 21.--Standardized average storage cost per ton-month by average capacity utilized and length of storage, Southwest shippers, estimated 1969

Months in storage	Average percent of capacity utilized																													
	10			20			30			40			50			60			70			80			90			100		
	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars				
1	24.1943	12.0971	8.0648	6.0486	4.8389	4.0324	3.4563	3.0243	2.6883	2.4194																				
2	12.0971	6.0486	4.0324	3.0243	2.4194	2.0162	1.7282	1.5121	1.3441	1.2097	1.0081	.8641	.7561	.6721	.6049	.5377	.4839	.4032	.3456											
3	8.0648	4.0324	2.6883	2.0162	1.6130	1.2097	.9678	.8065	.6913	.6049	.5377	.4839	.4032	.3456																
4	6.0486	3.0243	2.4194	2.0162	1.5121	1.2097	.9678	.8065	.6913	.6049	.5377	.4839	.4032	.3456																
5	4.8389	2.4194	1.6130	1.2097	.9678	.8065	.6913	.6049	.5377	.4839	.4032	.3456																		
6	4.0324	2.0162	1.3441	1.0081	.8641	.7561	.6913	.6049	.5377	.4839	.4032	.3456																		
7	3.4563	1.7282	1.1521	.8641	.7561	.6913	.6049	.5377	.4839	.4032	.3456																			
8	3.0243	1.5121	1.0081	.7561	.6913	.6049	.5377	.4839	.4032	.3456																				
9	2.6883	1.3441	.8961	.6721	.5377	.4480	.3840	.3360	.2987	.2688																				
10	2.4194	1.2097	.8065	.6049	.4839	.4032	.3456	.3024	.2688	.2419																				
11	2.1995	1.0997	.7332	.5499	.4399	.3666	.3142	.2749	.2444	.2199																				
12	2.0162	1.0081	.6721	.5040	.4032	.3360	.2880	.2520	.2240	.2016																				

Table 22.--Standardized average storage cost per ton-month by average capacity utilized and length of storage, South-west warehouses, estimated 1969

Months in storage	Average percent of capacity utilized									
	10	20	30	40	50	60	70	80	90	100
	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars
1	20.3736	10.1868	6.7912	5.0934	4.0747	3.3956	2.9105	2.5467	2.2637	2.0374
2	10.1868	5.0934	3.3956	2.5467	2.0374	1.6978	1.4553	1.2733	1.1319	1.0187
3	6.7912	3.3956	2.2637	1.6978	1.3582	1.1319	.9702	.8489	.7546	.6791
4	5.0934	2.5467	1.6978	1.2733	1.0187	.8489	.7276	.6367	.5659	.5093
5	4.0747	2.0374	1.3582	1.0187	.8149	.6791	.5821	.5093	.4527	.4075
6	3.3956	1.6978	1.1319	.8489	.6791	.5659	.4851	.4244	.3773	.3396
7	2.9105	1.4553	.9702	.7276	.5821	.4851	.4158	.3638	.3234	.2911
8	2.5467	1.2733	.8489	.6367	.5093	.4244	.3638	.3183	.2830	.2547
9	2.2637	1.1319	.7546	.5659	.4527	.3773	.3234	.2830	.2515	.2264
10	2.0374	1.0187	.6791	.5093	.4075	.3396	.2911	.2547	.2264	.2037
11	1.8521	.9261	.6174	.4630	.3704	.3087	.2646	.2315	.2058	.1852
12	1.6978	.8489	.5659	.4244	.3396	.2830	.2425	.2122	.1886	.1698

Table 23.--Standardized average storage cost per ton-month by average capacity utilized and length of storage,
Virginia-North Carolina shippers, estimated 1969

Months in storage	Average percent of capacity utilized											
	10			20			30			40		
	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	
1	29.1985	14.5992	9.7328	7.2996	5.8397	4.8664	4.1712	3.6498	3.2443	2.9199		
2	14.5992	7.2996	4.8664	3.6498	2.9199	2.4332	2.0856	1.8249	1.6221	1.4599		
3	9.7328	4.8664	3.2443	2.4332	1.9466	1.6221	1.3904	1.2166	1.0814	.9733		
4	7.2996	3.6498	2.4332	1.8249	1.4599	1.2166	1.0428	.9125	.8111	.7300		
5	5.8397	2.9199	1.9466	1.4599	1.1679	.9733	.8342	.7300	.6489	.5840		
6	4.8664	2.4332	1.6221	1.2166	.9733	.8111	.6952	.6083	.5407	.4866		
7	4.1712	2.0856	1.3904	1.0428	.8342	.6952	.5959	.5214	.4635	.4171		
8	3.6498	1.8249	1.2166	.9125	.7300	.6083	.5214	.4562	.4055	.3650		
9	3.2443	1.6221	1.0814	.8111	.6489	.5407	.4635	.4055	.3605	.3244		
10	2.9199	1.4599	.9733	.7300	.5840	.4866	.4171	.3650	.3244	.2920		
11	2.6544	1.3272	.8848	.6636	.5309	.4424	.3792	.3318	.2949	.2654		
12	2.4332	1.2166	.8111	.6083	.4866	.4055	.3476	.3042	.2704	.2433		

Table 24. - Standardized average storage cost per ton-month by average capacity utilized and length of storage,
Virginia-North Carolina warehouses, estimated 1969

Months in storage	Average percent of capacity utilized											
	10			20			30			40		
	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars
1	15.9948	7.9974	5.3316	3.9987	3.1990	2.6658	2.2850	1.9994	1.7772	1.5995		
2	7.9974	3.9987	2.6658	1.9994	1.5995	1.3329	1.1425	.9997	.8886	.7997		
3	5.3316	2.6658	1.7772	1.3329	1.0663	.8886	.7617	.6665	.5924	.5332		
4	3.9987	1.9994	1.3329	.9997	.7997	.6665	.5712	.4998	.4443	.3999		
5	3.1990	1.5995	1.0663	.7997	.6398	.5332	.4570	.3999	.3554	.3199		
6	2.6658	1.3329	.8886	.6665	.5332	.4443	.3808	.3332	.2962	.2666		
7	2.2850	1.1425	.7617	.5712	.4570	.3808	.3264	.2856	.2539	.2285		
8	1.9994	.9997	.6665	.4998	.3999	.3332	.2856	.2499	.2222	.1999		
9	1.7772	.8886	.5924	.4443	.3554	.2962	.2539	.2222	.1975	.1777		
10	1.5995	.7997	.5332	.3999	.3199	.2666	.2285	.1999	.1777	.1599		
11	1.4541	.7270	.4847	.3635	.2908	.2423	.2077	.1818	.1616	.1454		
12	1.3329	.6665	.4443	.3332	.2666	.2222	.1904	.1666	.1481	.1333		

Table 25.--Standardized average storage cost per ton-month by average capacity utilized and length of storage, all shippers, estimated 1969

Months in storage	Average percent of capacity utilized											
	10			20			30			40		
	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars
1	21.1150	10.5575	7.0383	5.2787	4.2230	3.5192	3.0164	2.6394	2.3461	2.1115		
2	10.5575	5.2787	3.5192	2.6394	2.1115	1.7596	1.5082	1.3197	1.1731	1.0557		
3	7.0383	3.5192	2.3461	1.7596	1.4077	1.1731	1.0055	.8798	.7820	.7038		
4	5.2787	2.6394	1.7596	1.3197	1.0557	.8798	.7541	.6598	.5865	.5279		
5	4.2230	2.1115	1.4077	1.0557	.8446	.7038	.6033	.5279	.4692	.4223		
6	3.5192	1.7596	1.1731	.8798	.7038	.5865	.5027	.4399	.3910	.3519		
7	3.0164	1.5082	1.0055	.7541	.6033	.5027	.4309	.3771	.3352	.3016		
8	2.6394	1.3197	.8798	.6598	.5279	.4399	.3771	.3299	.2933	.2639		
9	2.3461	1.1731	.7820	.5865	.4692	.3910	.3352	.2933	.2607	.2346		
10	2.1115	1.0557	.7038	.5279	.4223	.3519	.3016	.2639	.2346	.2111		
11	1.9195	.9598	.6398	.4799	.3839	.3199	.2742	.2399	.2133	.1920		
12	1.7596	.8798	.5865	.4399	.3519	.2933	.2514	.2199	.1955	.1760		

Table 26. --Standardized average storage cost per ton-month by average capacity utilized and length of storage, all warehouses, estimated 1969

Months in storage	Average percent of capacity utilized											
	10	20	30	40	50	60	70	80	90	100		
Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	
1	25.5906	12.7953	8.5302	6.3977	5.1181	4.2651	3.6558	3.1988	2.8434	2.5591		
2	12.7953	6.3977	4.2651	3.1988	2.5591	2.1326	1.8279	1.5994	1.4217	1.2795		
3	8.5302	4.2651	2.8434	2.1326	1.7060	1.4217	1.2186	1.0663	.9478	.8530		
4	6.3977	3.1988	2.1326	1.5994	1.2795	1.0663	.9140	.7997	.7109	.6398		
5	5.1181	2.5591	1.7060	1.2795	1.0236	.8530	.7312	.6398	.5687	.5118		
6	4.2651	2.1326	1.4217	1.0663	.8530	.7109	.6093	.5331	.4739	.4265		
7	3.6558	1.8279	1.2186	.9140	.7312	.6093	.5223	.4570	.4062	.3656		
8	3.1988	1.5994	1.0663	.7997	.6398	.5331	.4570	.3999	.3554	.3199		
9	2.8434	1.4217	.9478	.7109	.5687	.4739	.4062	.3554	.3159	.2843		
10	2.5591	1.2795	.8530	.6398	.5118	.4265	.3656	.3199	.2843	.2559		
11	2.3264	1.1632	.7755	.5816	.4653	.3877	.3323	.2908	.2585	.2326		
12	2.1326	1.0663	.7109	.5331	.4265	.3554	.3047	.2666	.2370	.2133		

Table 27.--Standardized average storage cost per ton-month by average capacity utilized and length of storage, all facilities, estimated 1969

Months in storage	Average percent of capacity utilized											
	10			20			30			40		
	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars
1	21.9172	10.9586	7.3057	5.4793	4.3834	2.6529	3.1310	2.7397	2.4352	2.1917		
2	10.9586	5.4793	3.6529	2.7397	2.1917	1.8264	1.5655	1.3698	1.2176	1.0959		
3	7.3057	3.6529	2.4352	1.8264	1.4611	1.2176	1.0437	.9132	.8117	.7306		
4	5.4793	2.7397	1.8264	1.3698	1.0959	.9132	.7828	.6849	.6088	.5479		
5	4.3834	2.1917	1.4611	1.0959	.8767	.7306	.6262	.5479	.4870	.4383		
6	3.6529	1.8264	1.2176	.9132	.7306	.6088	.5218	.4566	.4059	.3653		
7	3.1310	1.5655	1.0437	.7828	.6262	.5218	.4473	.3914	.3479	.3131		
8	2.7397	1.3698	.9132	.6849	.5479	.4566	.3914	.3425	.3044	.2740		
9	2.4352	1.2176	.8117	.6088	.4870	.4059	.3479	.3044	.2706	.2435		
10	2.1917	1.0959	.7306	.5479	.4383	.3653	.3131	.2740	.2435	.2192		
11	1.9925	.9962	.6642	.4981	.3985	.3321	.2846	.2491	.2214	.1992		
12	1.8264	.9132	.6088	.4566	.3653	.3044	.2609	.2283	.2029	.1826		

Table 28.--Insect prevention and control costs per ton received of farmers' stock peanuts, 1969 1/

Item	Type of firm		
	Warehouse	Sheller	All facilities
	Dollars	Dollars	Dollars
Machinery <u>2/</u>	0.0076	0.0076	0.0076
Insecticides:			
Entering <u>3/</u> .....	.1313	.1313	.1313
Surface spray <u>4/</u> .....	.0038	.0038	.0038
Warehouse spray <u>4/</u> ....	.0038	.0038	.0038
Labor <u>5/</u> .....	.2701	.1638	.1830
Total .....	.4166	.3103	.3295

1/ Includes cost of warehouse cleaning prior to certification.

2/ Average cost of all firms.

3/ Cost calculated on recommended application rate for 57 percent premium-grade malathion emulsifiable concentrate at 1969 suggested sales prices.

4/ Cost calculated on recommended application rate for 25 percent premium-grade malathion wettable powder at 1969 suggested sales prices.

5/ Average hourly labor cost to the firm was calculated to be \$1.74.

Sampling

The sample used in this study was drawn from a total universe of 207 peanut storage facilities in three distinct production areas. Facilities within each area were grouped by type of service performed and peanut storage capacity. Both independent warehouses and shellers were sampled at four capacity group levels by production area. The sampling rate at each level was proportional to the total capacity of that stratum. Finally, a random sample was drawn from each level. The sampling procedure was developed in consultation with the Statistical Reporting Service, U. S. Department of Agriculture.

Cost and other data were obtained from each plant by an economist or an auditor assigned to the Economic Research Service from other USDA agencies. The cost data and related volumes for each service performed were summarized and tabulated by plant, type of facility, and area, according to the plan outlined below.

Standardized Depreciation and Interest

To minimize cost variation effects among plants in depreciation allowances and interest on investment, data were summarized using standardized rates. Depreciation on buildings was charged at 5 percent of acquisition cost. A 10-percent depreciation allowance was charged to cleaning and drying, handling, and miscellaneous equipment. Interest allowance on capital investment was computed at 6 percent of half the acquisition cost of buildings and equipment. Interest at 6 percent of acquisition cost was allowed for land.

Replacement Costs

Warehouse replacement costs were developed from cost records listing newly built facilities in each area by type of operation. Costs per cubic foot for warehouse construction were estimated as follows:

<u>Area</u>	<u>Cost per cubic foot</u> (Cents)
Southeast:	
Independent warehouses	15.42
Shellers	12.48
Southwest:	
Independent warehouses	12.05
Shellers	21.24
Virginia-North Carolina:	
Independent warehouses	21.30
Shellers	19.80

These estimates were applied to the total number of cubic feet in each facility surveyed.

Replacement costs for machinery and equipment were developed by updating the cost of each item, using the Index of Machinery and Motive Products (1957-59 = 100) published by the U.S. Bureau of the Census in "Statistical Abstracts of the United States."

Expected Effect of 1968 Minimum Wage Law

Labor costs per ton were developed to show the effect of the new minimum wage rates beginning February 1, 1968. These costs were computed from regular and overtime hours reported by firms surveyed.

Labor costs shown may be considered as an upper limit for actual costs incurred, because firms can be expected to be more careful now in using labor, especially overtime, than under the old wage rates.

Method of Allocation

Cost items were allocated to services performed as follows:

<u>Cost item</u>	<u>Basis for allocation</u>
Insurance:	
Warehouses	Direct to storage
Cleaning and drying equipment	Direct to cleaning and drying
Handling equipment	Hours recorded to specific service
Office and miscellaneous equipment	Revenue
Taxes	Same as Insurance
Leases and rentals	Same as Insurance
Depreciation	Same as Insurance
Interest on capital investment	Same as Insurance
Land	Revenue
Direct labor	Individual plant basis
Administrative overhead:	
Management and clerical salaries	Individual plant basis
Supplies	Revenue
Home office cost	Revenue
Repairs and maintenance:	
Warehouse	Direct to storage
Other	Revenue

<u>Cost item</u>	<u>Basis for allocation</u>
Utilities:	
Electricity	Hours and horsepower usage
Other	Revenue
Drier fuel	Direct to cleaning and drying
Interest on working capital	Out-of-pocket costs
Other	Revenue

Definition of Services

Cleaning and drying--unloading peanuts at cleaner or drier, or both; physically cleaning and/or drying peanuts prior to storage; and transporting them from cleaner or drier to receiving site.

Receiving--weighing, sampling, grading, issuing warehouse receipts, and moving peanuts into storage.

Storage--custodial functions necessary during warehousing.

Load-out--weighing, sampling, grading, and removing peanuts from storage onto transport equipment.





U.S. Department of Agriculture
Washington, D.C. 20250

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